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ABSTRACT

The 81 women who entered the U.S. Naval Academy in the summer of 1976 were breaking precedent and attempting to function in a male ethos with virtually no female role models. A central purpose of this study was to determine how various degrees of contact between male and female midshipmen would affect male attitudes. Plebes were administered two specially designed questicnnaires, one in October 1976 and one in May 1977; 500 upperclassmen participated in the second survey. Analyses of responses showed that exposure to women as peers at the academy did tend to break down stereotyping and traditionalism among male plebes during the first year of integration. Additional analyses of results, conclusions, and recommendations are included in the report. (Author/HSE)

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WOMEN AT THE NAVAL ACADEMY: THE FIRST YEAR OF INTEGRATION

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WOMEN AT THE NAVAL ACADEMY: THE FIRST YEAR OF INTEGRATION

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The first year of integration of women midshipmen was studied at the U.S. Naval Academy. The degree of traditionalism of males of the Class of 1980 toward rights and roles of women in society was evaluated as a function of level of contact with female plebes. A small effect on the Attitudes Toward Women Scale was found after 5 months of integration, with men in mixed-sex platoons or squads expressing the most equalitarian attitudes. Irrespective of company assignment, the male plebes became more equalitarian by the end of

the academic year. In general, these men were least equalitarian in areas that will affect them most closely as naval officers, as in their opinions about shipboard and other military roles for women. Upperclassmen were most resistant to the integration of Annapolis (19% were neutral or favorable toward coeducation, vs. 26% of plebe men).

Females and males had very different perceptions of treatment of the sexes in the 1976-77 year, with the majority of men perceiving favoritism to women, and women denying they received such treatment, except perhaps in the area of physical education. Women generally felt resented and less accepted than male peers. Greater numbers of women in more varied roles (e.g., upperclassmen) should partially alleviate several problems by reducing the overvisibility of the women and resultant performance pressures, as well as by allowing more peer contact to challenge the stereotypes held by men.

FOREWORD

This research and development was performed under Work Unit Number 55.521.021.03.03, Personnel Assimilation and Supervision, under the sponsorship of the Chief of Naval Personnel. A version of this report was presented at the National Biennial Conference of the Inter-University Seminar on Armed Forces and Society, Chicago, Illinois (October 1977), and will be published in Armed Forces and Society, Summer 1978.

The cooperation of the Office of Professional Development, U.S. Naval Academy, is gratefully acknowledged. Appreciation is also expressed to Patricia Thomas for initiating the present research and to Donna Copeland for her invaluable assistance in data analysis.

J. J. CLARKIN
Commanding Officer

SUMMARY

Problem

The 81 women who entered the U.S. Naval Academy (USNA) in the summer of 1976 were breaking precedent and attempting to function in a male ethos with virtually no female role models. Their small numbers ensured that all their actions would stand out and be subject to overevaluation, and the initial attitudes of male midshipmen toward coeducation were known to be generally unfavorable. Problems of assimilation were expected, involving both sexes. It was deemed important therefore to track the integration process from the perspectives of male and female plebes, as well as of upperclassmen.

Objective

A central purpose of this study was to determine how various degrees of contact between male and female midshipmen at USNA would affect male attitudes. Contact was defined structurally as assignment to either all-male or mixed-sex companies, platoons, and squads. Further, attempts were made to determine the transitional problems of women plebes of the Class of 1980 and to contrast the attitudes towards women's rights and roles in society and in the military held by classes and genders at USNA and comparison institutions.

Approach

USNA plebes were administered two specially designed questionnaires, one in October 1976 and the second in May 1977; 500 upperclassmen participated in the second survey. Background variables, attitudes toward women in society, opinions about men and women in the military and at the Academy, and the year's experiences at USNA were assessed.

Findings

Analyses of responses to the two surveys showed that exposure to women as peers at USNA did tend to break down stereotyping and traditionalism, as measured by the Attitudes Toward Women Scale, among male plebes during the first year of integration. Upperclassmen were shown to be more resistant to sexual integration of USNA than plebe men.

The women at USNA favored full equality for women in the military and in society to a much greater degree than did the men. Males of the Class of 1980 tended to be least equalitarian in areas that will affect them most closely as naval officers. About two-thirds disapproved of shipboard or combat roles for women, and nearly three-fourths would have preferred Annapolis to remain all male.

The perceptions of the 1976-77 year at USNA diverged widely among female plebes, male plebes, and upperclassmen. Women felt their impact on USNA had been positive overall, although one-third felt women had lowered physical

performance standards. Men were more likely to see the impact of women on USNA's image and standards as neutral or negative, and most were convinced that women had been shown favoritism. Both sexes agreed that men and women as groups had tended to compete in the first year of integration.

Excessive publicity and male resentment were cited by most female plebes (67%) as problems in the 1976-77 year. A larger proportion of women experienced problems with academic standards than with physical standards (55 vs. 36%).

Conclusions

It was concluded that the addition of more women, which will increase opportunities for men to associate with them, and the movement of the Class of 1980 women into more varied roles as upperclassmen will accelerate the change toward equalitarian attitudes that began in a small way in 1976-77. Graduation of the all-male classes should also tend to increase acceptance of women as midshipmen, and to decrease polarization between the sexes. With a fading of the novelty of coeducation, undue publicity and visibility of the women should decrease, along with the performance pressures for women that these phenomena generate. However, women will have to be granted more equality in the larger Navy system before they are fully legitimized at USNA.

Recommendations

Since women will be a statistical minority at USNA into the indefinite future, several avenues of decreasing polarization and male resentment were recommended. Strategies should include enhancement of the conditions conducive to a positive effect of intergroup contact, such as the fostering of a cooperative rather than competitive atmosphere between the sexes and the ensuring of equal status between groups. Further, the pluralistic beliefs about favoritism uncovered in this study could be brought into more congruence if males were helped to understand the women's perceptions, since women generally felt less accepted rather than more favored vis-a-vis men.

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INTRODUCTION

Problem and Background

Following the mandate of the Stratton Bill (October 8, 1975), women were admitted to the three service academies in the summer of 1976 for the first time in our history. These first female cadets in the Class of 1980 were a recognizable minority attempting to function in a tradition-rich male environment. Their presence and the change it represents presented problems of assimilation, involving both sexes. It also provided the opportunity to observe a "natural experiment"--in this case at the United States Naval Academy (USNA)--as attitudes of midshipmen adapted to this unique situation.

The military, which led the way a few decades ago in racial integration, has been similarly progressive in many aspects of its treatment of women. For example, equal pay for equal work is an indisputable fact. However, the military is still a conservative male stronghold. It has been pointed out, for example (DeFleur & Gillman, Note 1), that maleness traditionally has been an ascribed criterion for entrance and participation as a military officer, and that the military officer role is seen as contradictory to femininity. The shift in emphasis for the officer from warrior-hero to military manager or technical specialist will gradually lessen this role conflict for military women. Despite its masculine image, the military has experienced rapid recent expansion in the numbers and roles of women in its ranks (Goldman, 1973; Thomas, Note 2). Over the last 5 years, the number of women in the Navy increased over fourfold to a current strength of near 23,000. In 1972, "Z-Gram" 116 suspended restrictions on Navy women succeeding to command ashore or achieving flag rank, opened NROTC to women, and expanded opportunities for women line officers (90% of whom were then in traditional administration and communication billets (Coye, Note 3)).

Admission of women to the service academies represented another important step in the legitimization of the female military officer. Galloway (1976) predicted that "the mission of the service academies will not be changed by the admission of women. What will be changed is the greater acceptance of women as legitimate coprofessionals as they share in this unique educational experience" (p. 647). Graduates of the service academies are viewed as an officer elite and have access to advantages and important contacts throughout their military careers. Coeducation at the academies is thus an important milestone in the struggle of military women for equality.

The legal restriction of women from combat and shipboard roles, however, results in some major remaining contradictions. Legally, Navy women must be treated differently from Navy men. Title 10 of the U.S. Code, Section 6015, states that women "may not be assigned to duty in aircraft that are engaged in combat missions nor may they be assigned to duty on vessels of the Navy other than hospital ships and transports." This restriction had an immediate impact on women midshipmen in the summer of 1976, in that they could not embark on orientation cruises and flights without being "required to take leave, wear civilian clothes, and be the guest of a male Navy member" (CNO message, cited in Hoover, 1977, p. 118).

If the purpose of the service academies is to produce combat leaders, and women are restricted by Section 6015, then full equality for the female officer remains an impossibility. This fact was expected to justifiably create dissonance among both male and female midshipmen--dissonance beyond the power of USNA to resolve.

Context of the Present Study

Eighty-one women arrived at Annapolis in the summer of 1976 to enter the Class of 1980, forming a minority of approximately six percent of the class. Academy administrators, faculty, and staff made clear their intent, in accordance with the new Public Law 94-106, to treat the women no differently from the 1200 male fourth classmen (or "plebes") "except for those minimum essential adjustments in such standards required because of physiological differences between male and female individuals."

Touhey (1974) found that occupations invaded by women suffered a loss of prestige and desirability. The admission of women to USNA had a similar effect; that is, many midshipmen felt that it lowered USNA standards and eroded military tradition. To encourage more open-mindedness among upperclassmen, workshops were conducted in the 1975-76 academic year by the National Training Laboratory. Males in the Class of 1980 were not exposed to these workshops since coeducation would be in effect from the beginning of their USNA experience and thus "[illegible]ism education and training" appeared to be unnecessary (Ustick, Note 4).

Attitudes of the male majority at USNA were an important, even if subjective and relatively intangible, aspect of the atmosphere in which the female plebes were required to function. In a study of the civilian organizational assimilation process, Johnson and Graen (1973) suggest that the newcomer, the superior, and the peer group all hold expectations about a new employee's behavior and, thus, all are involved in role definition. Impediments to successful assimilation, such as role ambiguity and role conflict, occur when a role is not defined clearly or when role expectations between various parties are divergent. USNA, with its focus on male traditions, held a high likelihood for role conflict and ambiguity for women. Male resentment or low expectations of women could function to limit women's performance.

The women were not only breaking precedent and attempting to function in a male ethos with virtually no female role models but also, their small numbers ensured that their actions would stand out and be subject to overevaluation, as occurred when the first minorities or women appeared in innovative roles in civilian industry. It was deemed important therefore to track the integration process from the perspectives of both female and male midshipmen.

The present study focuses on the academic year of 1976-77. The very important initial 1976 plebe summer experience of integrated basic training was assessed only in retrospect. During the fall semester, women--usually in groups of three--were assigned to 24 of the 36 companies at USNA. They were billeted with their respective companies in Bancroft Hall. This arrangement promoted the likelihood of their interactions with other company members, but decreased the likelihood of those with women who were assigned to other companies.

About two-thirds of male plebes and upperclassmen were in integrated companies. Approximately one-third of the male plebes were also in integrated platoons or squads during a given semester. Thus, these men had a relatively high level of contact, as structurally defined, with female fourth classmen. For example, meals are taken together by platoon (consisting of 3 squads or 36 midshipmen, 12 of whom are plebes). Actual contact, which would include all the informal interactions initiated by midshipmen themselves (as well as "involuntary" contacts that ensued due to assignment to mixed-sex companies, etc.), could not be assessed. However, it was possible to contrast the attitudes of midshipmen assigned to all-male companies, whose stereotypes of women were less likely to be challenged by peer contacts with them, with those of midshipmen assigned to mixed-sex companies who had closer structural contact with the female minority at USNA.

Contact Hypothesis

Intergroup contact over a period of time is believed to be a potent stimulus of attitude change. For example, Stouffer, Suchman, DeVinney, Star, and Williams (1949), in their review of emergency ethnic integration of certain Army platoons in WWII, reported that whites who had an opportunity for cooperative intergroup contact with black soldiers became less prejudiced than others.

Intergroup contact, however, does not always change attitudes in the desired direction (Cook, 1970), and the extensive previous research on ethnic contact has not included attitude change toward women in innovative roles. Reduction of minority stereotyping by majority members through contact with minority members is likely to occur when (1) the authority structure encourages equalitarianism (Bettelheim & Janowitz, 1964), (2) majority and minority members share equal status, (3) social norms encourage friendly association, (4) the two groups share similar background characteristics, (5) members of the two groups get to know each other as individuals rather than in constricted roles, and (6) a cooperative rather than competitive reward structure exists (Wrightsman, 1972).

It was expected that all of these conditions, except possibly the last, would apply to some degree for men and women of the USNA Class of 1980. Academy administrators were determined to treat female midshipmen in a fully equal manner, and similar admission standards ensured objectively equal status for male and female plebes. Further, USNA was in a unique position to effect equal treatment since, as Moskos (1966) has pointed out, military organizations exist in relative isolation from the larger context of social life and possess a hierarchical power structure through which rules can be imposed. Further, violations toward minorities by service members are "both more visible and subject to quicker sanctions" (p. 148).

Amir (1969), in his review of studies of ethnic relations, stated that a contact situation may produce negative attitude changes when (1) the situation produces intergroup competition, (2) the contact is unpleasant or involuntary, (3) the situation causes the prestige of one group to be lowered, (4) the majority group is frustrated (and hence more likely to

scapegoat the minority group), (5) the two groups have moral or ethnic standards that are objectionable to each other, and (6) minority group members are lower in status or in any other relevant characteristic than majority group members. It was anticipated that several of these conditions would also apply to the male majority and female minority at USNA.

For example, while sexually integrated companies were expected to be cohesive units, it was also recognized that the Academy has a competitive atmosphere and places a high emphasis on individual achievement. Further, for upperclassmen at least, conditions (2) and (3) above partially obtained, for many commented that coeducation was forced upon them by Congress, thus making contact with women as midshipmen involuntary, and that the prestige (which translated for many to "maleness") of USNA had been lowered as a result. It was speculative whether the last three conditions would be major influences. Plebe year is stressful, but the degree to which stress may promote scapegoating by majority males is unknown. If women were perceived as "getting off easy" compared to male plebes (e.g., lowered physical standards), then such a reaction would be more likely. The degree to which the differing cultural or social standards (condition 5) of the women and men would hinder positive attitudes was also unknown. Finally, while admissions procedures ensured relative equality of male and female entrants, the physical performance differentials, which became apparent during plebe summer, created one relevant area in which women could be perceived as being of "lower status."

Purpose

The primary purpose of this study was to determine how various degrees of contact between male and female midshipmen would affect male attitudes. Before women were admitted, it was predicted that the attitudes of males in the first integrated class would become more favorable since most of the conditions necessary for such change were present. Thus, it was hypothesized that:

1. Stereotyping of women would decrease over the year.

2. Equalitarian attitudes toward women would reach the highest level among men assigned to integrated squads and platoons.

3. Upperclassmen would resist integration more than men of the Class of 1980.

4. Women as a group would endorse equalitarian roles for the sexes in all areas to a significantly greater extent than men.

APPROACH

Questionnaires

Two specially designed questionnaires were developed, the first to be administered at the beginning of the academic year; and the second, at the end. The questionnaires were identical, except that the initial survey included eight items to assess background characteristics and three to assess expectations, and the latter survey, 12 additional multiple-choice questions on roles for female military officers (some of which were borrowed from Coye, Note 3) and an extensive section addressing the year's experiences at the Academy.

Both questionnaires included the following:

1. The 25-item Attitudes Toward Women Scale (AWS), developed by Spence, Helmreich, and Stapp (1973). The AWS assesses attitudes toward women's proper rights and roles in society by asking the respondent to indicate the extent of his agreement with such statements as "A woman should not expect to go exactly the same places or have quite the same freedom of action as a man." Responses were to be made on a 4-point scale, with 1 meaning "strongly agree"; and 4, "strongly disagree." The areas covered by AWS questions include dating, sexual, and marriage relationships, as well as vocational, educational, and intellectual roles of women. A high total score on the AWS denotes equalitarian views; and a low score, traditional views. Scores may range from 0 to 75.

Since the AWS was used at the U.S. Military Academy at West Point (USMA) and at the U.S. Air Force Academy (USAFA), interinstitution comparative data were available. Also, Spence et al. (1973, 1975) provide normative data on the AWS based on responses made by University of Texas students.

2. Two statements about male/female roles in the family were provided illustrating a traditional or nontraditional division of responsibility and respondents were asked which statement they would most agree with.

3. A total of 16 items, either multiple-choice or extent of agreement, were included to assess opinions about men and women in the military and opinions on the sexual integration at the Academy. (Several of the former items were from Woelfel, Savell, & Collins, 1976.)

Procedure

The initial survey was administered to the USNA Class of 1980 in a group meeting on 1 October 1976. Usable questionnaires were obtained from 67 women and 886 men.

In mid-May of 1977, the second survey was administered to the Class of 1980 and to about 500 upperclassmen (classes of 1977, 1978, 1979). Usable questionnaires were obtained from 62 women and 993 men of the Class of 1980 and 476 upperclassmen.

RESULTS

Background and Entrance Characteristics

Responses to the demographic items included in the initial survey (October 1976) showed that the women of the Class of 1980 were twice as likely to come from military families as the men (36 vs. 18%) and that there were proportionately fewer racial minority women than men (6 vs. 12%). Comparisons of the responses made by women and men concerning the size of their home towns, the socioeconomic class of their parents, parental encouragement of their application to USNA, and their mothers' employment history yielded no significant differences.

Table 1 presents selected entrance characteristics of male and female midshipmen of the Class of 1980, obtained from academy admission records. As shown, women had a higher mean score than men on the Scholastic Aptitude Test verbal measure and a lower mean on the math aptitude measure. They scored lower on measures of engineering science interest and of involvement in high school extracurricular activities (which included athletics). Finally they ranked higher academically in their high school classes and received higher recommendations.

Although Table 2 is only of tangential interest to the present report, it does reveal that the attrition rate for women in 1976-77 was nearly twice that of their male classmates. The 66 women for whom final grades were available did not perform as well academically as a group as the men, but they did not differ significantly in their average Military Quality Point Ratios.

Attitudes Toward Women in Society

Table 3, which compares means of scores obtained by various groups on the Attitudes Toward Women Scale (AWS), shows that males of all three service academies surveyed in 1976-77 held significantly more traditional attitudes toward women's rights and roles in contemporary society than did males at the University of Texas surveyed in 1975, and that all the male groups held less equalitarian views than did the various female groups. Women fourth classmen at the Naval and Air Force Academies and women at the University of Texas held similar views as to the degree of equalitarianism, but none of these women were as equalitarian as those at the U.S. Military Academy (Army) ($p = .05$).

Measures of attitudes toward women were not available for fourth class males at the Naval Academy prior to October 1976. However, to illustrate the impact that basic cadet training (BCT) has on such attitudes, Table 3 includes data for the Air Force Academy for June and August of 1976, which show a shift toward traditionalism among male plebes. The mean of the October AWS USNA measure, which is most comparable timewise to the August USAFA measure, does not differ significantly from the mean of the USAFA measure or that of the USMA measure at entry (July 1976).

Table 1

Comparison of Selected Entrance Characteristics of Male and Female Midshipmen, Class of 1980

Measure[a]	Male (N = 1200) Mean	Male (N = 1200) SD	Female (N = 81) Mean	Female (N = 81) SD	Difference t
SAT Verbal Aptitude	566	79	604	75	-4.39**
SAT Math Aptitude	660	70	649	52	1.78*
Strong Vocational Interest Blank Engineering Science	542	85	525	72	1.94*
Disenrollment Scale	536	86	532	80	.41
Combined athletic and nonathletic extra-curricular activities, high school	510	70	482	73	3.41**
High school class standing	570	111	646	86	-7.45**
Recommendations	798	132	847	100	-4.17**

[a]Entrance characteristics are standardized to a mean of 500 and standard deviation of 100.

*$p < .05$, one-tailed, women predicted to be lower.

**$p < .01$, two-tailed.

Table 2

Comparison of Year End Performance Criteria for Male and Female Midshipmen, Class of 1980

	Male (N = 1086)		Female (N = 66)		Difference
Measure	Mean	SD	Mean	SD	t
Military Quality Point Ratio	2.95	.54	2.83	.70	1.36
Academic Quality Point Ratio	2.66	.54	2.46	.47	3.30*
Nonmedical Attrition Rate (June 1977)[a]	10.6%		20.2%		

[a]Figures for Class of 1980 women quoted in Los Angeles Times, June 13, 1977: USAFA, 17 percent attrition; USMA, 26 percent, USNA, 21 percent.

*$p < .01$, two-tailed.

Table 3

Attitudes Toward Women Scale (AWS) Scores of Male and Female Midshipmen and Several Comparison Groups

Sample	Date	N	Mean	SD
USNA				
Fourth Class Males	Oct 1976	825	41.67	8.90
Fourth Class Females	Oct 1976	62	54.47	9.32
USMA[a]				
Fourth Class Males	Jul 1975	1277	42.34	9.91
Fourth Class Females	Jul 1976	115	57.38	8.69
USAFA[b]				
Fourth Class Males	Jun 1976	367	42.10	12.38
Fourth Class Females	Jun 1976	42	54.09	12.35
Fourth Class Males	Aug 1976	387	41.20	12.43
Fourth Class Females	Aug 1976	45	53.93	12.57
University of Texas[c]				
Males	1975	248	47.16	12.78
Females	1975	282	53.16	12.56
USNA Upperclassmen	May 1977	424	43.88	9.62
USMA Upperclassmen[a]	Mar 1976	2711	41.31	11.74
USAFA Upperclassmen[b]	Jun/Jul 1976	353	42.00	10.92

[a]From Vitters and Kinzer, Note 5.

[b]From DeFleur-Nelson, Gillman, and Marshak, Note 6.

[c]From Spence, Helmreich, and Stapp, 1975.

Table 3 also includes means of scores obtained by upperclassmen of all three service academies on measures of attitudes toward women. However, since the survey dates are so widely disparate, direct comparisons among institutions are not appropriate.

Effects of Contact

Assuming random assignment of men to companies, differences as a function of level of contact may be assessed on the October survey, even though baseline measures (i.e., at entry in July 1976) are not available. As shown in Table 4, by October, after 5 months of integration, contact had had a significant effect, with the men assigned to mixed-sex platoons or squads reporting the most equalitarian attitudes on the AWS; those assigned to mixed companies, but not to mixed platoons or squads, the most traditional attitudes; and those assigned to all-male companies, intermediate attitudes. However, these differences, though statistically significant, are small in a practical sense. The trend of the findings also indicates that there is no simple effect of contact. Company-level contact may influence men toward more traditional attitudes toward women; however, as predicted, closer contact--at the platoon or squad level--increased the level of equalitarianism.[1] Amir (1969) noted that superficial contact can result in negative attitude change, while more "intimate" contact (which could be defined as squad or platoon level contact in the present study) can facilitate favorable attitudes.

Viewing the results of the May 1977 survey as a second group of criteria, degree of contact with women--as defined by squad, platoon, and company assignment--did not exert a measurable differential impact on the final male attitudes toward women. Although the AWS means of the three contact groups retained the same relative order, they converged so that they no longer differed significantly. Even when initial AWS scores were used as covariates to achieve greater sensitivity, mean scores obtained in the second survey still failed to differ between contact groups. End-of-year responses to items measuring attitudes toward women in the military, and at USNA specifically, were not significantly different among the contact groups, nor was degree of attitude change between October and May related to either level of contact or initial favorability of attitudes.

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[1]No clearer interpretation of trends was evidenced when the contact variable was further categorized, by separating (1) groups with squad-level contact from those with platoon-level contact and (2) groups with contact both semesters from those with fall or spring contact only.

Table 4

AWS Scores for Men of the Class of 1980 by Contact Groups

Group	N	AWS Mean
Measured in October 1976		
Level of Contact, Fall only		
All male company	199	41.50
Mixed company	262	40.70
Mixed platoon or squad	249	42.65*
Measured in May 1977		
Level of Contact, Fall or Spring		
All male company	178	42.67
Mixed company	116	42.00
Mixed platoon or squad	377	43.29
Total Resurveyed Group		
October	661	41.45
May	661	42.77**

*$F(2,707) = 3.156$, $p < .05$.

**t(correlated) = 5.24, $p < .0001$.

The lack of a graduated effect of contact by May is partially due to the fact that assignment to all-male companies only restricted, but did not prevent, opportunities for contact. For example, by May virtually all plebes had had classroom contact with women. The failure of level of contact to exert a larger effect on attitudes is also consistent with the report of survey respondents concerning the lack of a cooperative atmosphere between the male and female plebes. A majority of both groups agreed that "At the Academy, the accomplishments of the individual are emphasized more than the accomplishments of the group." Approximately 75 percent of both groups asserted that they felt competitive toward most of their classmates, and between 60 and 70 percent agreed that Academy men and women had tended to compete with one another rather than to cooperate toward common goals. Such a competitive atmosphere would not be conducive to reducing negative stereotyping of the women by the men most closely associated with them.

Since one company commander at the Academy was a woman, the men in that company had encountered a "minority" member in a higher status position. In this regard, Amir (1969) stated that "contact between members of a majority group and high-status individuals of a minority group tends to reduce prejudice toward the whole minority group" (p. 307). Although results of the May survey showed that males reporting to the female company commander were slightly more equalitarian than other men on the May AWS and on the factors tapping attitudes toward women in the military and at the Academy, these differences were not significant.

It was noted earlier that USAFA plebe men became more traditional on the AWS after the summer of integrated BCT (see Table 3). This shift was partially attributed to the emphasis on physical performance during BCT and the perception of male cadets that women were slowing the squadron down (DeFleur-Nelson et al., Note 6). Priest (Note 7) reported the same trend toward traditionalism on the AWS for males of the West Point (USMA) Class of 1980. Further, he found that USMA male plebes in sexually-integrated squads were more negative on measures of intergroup hostility than other males. It was noted that the movement toward more conservative sex-role attitudes at USMA occurred as a result of basic cadet training even when no women were present during that training (i.e., during the previous summer--for the Class of 1979). It is reasonable to assume, therefore, that plebe summer of training at USNA had a similar impact to that at other institutions. It probably increased sex-role traditionalism for male plebes, particularly for those men of the Class of 1980 who underwent integrated training.

In light of the above, it is interesting to note that the impact of the full academic year at USNA was to move midshipmen, irrespective of company assignment, toward more equalitarian attitudes on the AWS. For those men whose May and October surveys could be matched ($N = 661$, Table 4), a correlated t-test reflected a highly significant change ($t = 5.24$, $p < .0001$. Although this phenomenon may simply indicate a liberalization of attitudes over time that would have occurred even without coeducation, the attitude shift may be due to the year's experience with integration. That is, it may represent an overall positive impact of intergroup contact. As noted, all plebes shared classes with women, where, presumably, they had more equal status. Since USAFA and USMA Class of 1980 data for the spring

of 1977 presently are not available, it is not possible to verify whether a trend toward higher AWS scores also occurred at those academies. There was a tendency for USNA women to become more equalitarian, but the difference between fall and spring AWS means was not statistically significant ($N = 50$).

Responses to the 16 specific items on women in the military and at USNA, which were included in both the May and October surveys, were analyzed to determine whether any change had occurred. Using a stringent significance level ($p < .01$) as a criterion, responses to five items reflected attitude change among male plebes. By May, the men were more likely to believe that (1) women could stand the stress of command responsibility, (2) they should be considered for important command positions even though they had no combat experience, and (3) fewer commissioned women than men would make a career of the Navy. Most still believed women are less capable of violence than men, but a significant shift toward a more equal view of men and women in this regard had occurred. Finally, the men were less likely to agree that "the Naval Academy develops qualities that are good for both men and women." The only significant shift ($p < .01$) among the women was toward greater disagreement with the assertion that "the image of a female in the military is favorable."

Friendship Patterns

In the second survey, respondents were asked how many close friendships they had formed with male and female classmates. Men in mixed companies reported that seven percent of their friends were female, a figure that does not differ significantly from the five percent reported by men in all-male companies. Overall, men chose an opposite-sex friend six percent of the time, which is consistent with the six percent female class membership, while women chose opposite-sex friends 66 percent of the time. Men claimed that they made between 21 and 22 close friendships, and women, 13 to 14. This finding may suggest that the women experienced more isolation than the men.

Male plebes were also asked, "Did you become friends with a woman as a frequent study or sports partner, a coworker on special projects such as football posters, or in extracurricular clubs or groups?" Forty percent replied affirmatively. Although men's company, platoon, and squad assignments were not related to these responses, the 40 percent of male plebes who reported having made friends with a woman classmate displayed a more equalitarian attitude on both the fall and spring AWS than did the 60 percent who responded that they had not made friends with a woman ($p < .05$). Although the direction of causality cannot be determined, this may suggest that attitudes determine informal contact more than structural contact (assignment to mixed-sex companies, platoons, and squads) affects attitudes. Males who had not befriended any peer women were also significantly more likely than other males to assert that Annapolis should remain all-male ($p < .01$).

Specific Attitudes Held by Women and Men

To compare the attitudes of men and women toward different aspects of women's equality, two factor analyses were performed on responses to the opinion items of the May questionnaire. The first analysis used responses of both male and female plebes; and the second, male only. For both analyses, the following five major factors emerged.

1. Expanded Military Roles for Women. Persons with low scores on the factor endorsed women serving on ships and in combat, and the training of women at the Naval Academy.

2. Impact of Women on Academy Standards. Related to areas of discipline, academic performance, and physical requirements.

3. Opportunities for Navy Women. Persons with low scores on this factor believe that women face discrimination and have inadequate opportunities for professional development, advancement, and full realization of their potential.

4. Acceptance and Image of the Military Woman. Taps opinions on the public image of military women and the degree to which they are accepted by Navy men.

5. Equal Treatment/Equal Risk. Concerns whether the granting of equal treatment and responsibilities to military women should be contingent on their assumption of equal risks (e.g., combat).

Items loading on these five factors are listed in Table 5. The five factors cumulatively accounted for 42 percent of the variance of the responses of men and women to the attitude questions. Low factor scores indicate equalitarian attitudes toward women in the military, positive perceptions of women's impact on academy standards, etc. Thus, directionality on factor scores is opposite to AWS scores, with high factor scores indicating traditionalism.

Table 6 compares spring AWS and factor scores obtained by male and female plebes in the May survey. As was the case for the October measures, women were significantly more equalitarian than men on the AWS and on factor 1, which addresses expanded roles for women in the military. Also, women were significantly more likely to believe that they had had a positive impact on academy standards, and that discrimination against women is a problem Navywide (factors 2 and 3). However, the similar means on factor 4 show that the two groups agreed that the image of the military woman is not particularly favorable, and that Navy women are not well accepted by Navy men. Finally, they did not differ significantly in endorsing the principle that equal treatment should involve equal risk in the military.

Table 5

Factor Loadings of Items Concerning Women in the Military

Item	Loadings
Factor 1: Expanded Military Roles for Women	
I agree with the effort to change policies to permit women to serve aboard Navy ships.	.75
Women officers should be given the same opportunities as their male counterparts, including sea duty and flying status.	.69
If women were assigned to combat ships, the Navy would. . . (Become more effective) (Stay the same) (Become less effective)	.68
Women should not be expected to serve in military combat on the front line.	-.62
I strongly feel that female military officers should be trained somewhere else. . . (vs.) I feel women have as much right as men to attend the Academy, so I support integration. . .	-.59
Since women are prevented by law from serving aboard ships, training them at Annapolis makes little sense and, moreover, is counterproductive because it results in fewer graduates capable of defending our country.	-.59
Women would perform as well in combat as men if they were properly trained.	.51
The Navy's role is best carried out by men only.	-.51
Considering current laws, the Academy should only train women midshipmen for leadership roles in noncombat situations.	-.50
Of all places, the military should remain a masculine stronghold.	-.50

Table 5 (Continued)

Item	Loadings
Factor 2: Impact of Women on Academy Standards	
What impact, in your opinion, has the admission of women to the Naval Academy had in the following areas? (Definitely positive to definitely negative):	
Discipline.	.59
Physical performance standards.	.58
My pride in being a part of the Brigade.	.50
Overall image of the Academy.	.40
Academic standards.	.32
Academy women have performed well in competitive situations.	.33
Factor 3: Opportunities for Navy Women	
Women officers are presently held back in their professional development because of ingrained beliefs held by men that women are not capable as managers.	.53
Unitl women are truly integrated into the Navy, there will be need for attention from Navy leadership to preclude sex discrimination practices and to elevate the status of women in the organization.	.48
Opportunities for Navy women who wish to develop their potential are inadequate.	.42
Factor 4: Acceptance & Image of the Military Woman	
Among civilians, the image of a female in the military is favorable.	.50
Women officers are well accepted by Navy men.	.48
The officers and professors at the Academy generally support integration of women into the military.	.39
Navy seniors treat men and women as equals.	.36

Table 5 (Continued)

Item	Loadings
Factor 5: Equal Treatment/Equal Risk	
Women in the military should be treated equally only if they will die in war like men.	.44
As long as women have no combat experience, they should not be considered for important command positions.	.27

Table 6

Comparison of AWS Scores and Factor Scores
for Male and Female Midshipmen, Class of 1980

Measure (May 1977)	Male (N = 962)		Female (N = 59)		Difference
	Mean	SD	Mean	SD	t
AWS[a]	42.83	9.50	54.54	9.58	-9.02*
Factor 1: Expanded military roles for women	.06	.88	-1.00	.50	14.88*
Factor 2: Impact of women on Academy standards	.06	.76	-.96	.68	11.06*
Factor 3: Opportunities for Navy women	.04	.75	-.65	.61	8.23*
Factor 4: Acceptance/Image of the military woman	.01	.74	-.02	.71	.23
Factor 5: Equal treatment/ Equal risk	.01	.75	-.16	.69	1.91

[a]Due to missing data, the AWS comparison is based on 876 men and 59 women.

*$p < .001$.

Another way of examining responses to the opinion items on the May survey is to group the items logically by content as in Table 7. This arrangement allows an interesting pattern to emerge. As the item content shifts from those assessing general attitudes regarding women in society toward more specific items on women in the military, on Navy ships, and at the Academy, the degree of equalitarianism among Class of 1980 males steadily decreases. As shown, 82 percent agreed with the first item under Women in Society, which is an abstract and equitable-sounding principle. However, only 51 and 43 percent, respectively, agreed with the principles of uniform military officer promotion procedures and equal opportunity for women military officers, which are the topics of the first two items under Women in the Military. Only about one-third approved of women in combat or on Navy ships, and only 26 percent either preferred coeducation at Annapolis or were neutral in their personal feelings. Certainly some well-reasoned arguments can be summoned in support of nonequalitarian views on these items. There is no way of ascertaining, from the survey responses, the practical and personal considerations that may have influenced these men's views, and chivalry may be as important as self-interest. However, one tendency is clear: the more the situation touched these men personally, the less likely they were as a group to endorse equal opportunity for women.

Women's responses to the items of Table 7 reveal that they are uniformly more equalitarian than the men. They all agreed that women should be allowed to work at any job they are capable of performing, 94 percent approved of shipboard service for women, and 82 percent would not discourage front-lines combat for women.

Table 7

Percentage of Class of 1980 Espousing Equalitarian View on Selected Items

Items with Equalitarian Response Indicated	Percentage Espousing Equalitarian View	
	Males (N = 981)	Females (N = 60)
Women in Society		
There should be a strict merit system in job appointment and promotion without regard to sex. (Agree)	82	97
Women should be allowed to work at any job they are capable of performing. (Agree)	78	100
Women should be given equal opportunity with men for apprenticeship in the various trades. (Agree)	77	94
On the average, women should be regarded as less capable of contribution to economic production than are men. (Disagree)	74	94
Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day. (Agree)	73	96
Women should assume their rightful place in business and all the professions along with men. (Agree)	69	91
Women in the Military		
I agree with recommended changes which will place Navy women in competition with male officers for promotion to all grades. (Agree)	51	85
Women officers should be given the same opportunity as their male counterparts, including sea duty and flying status. (Agree)	43	97
Of all places, the military should remain a masculine stronghold. (Disagree)	40	90
Women would perform as well in combat as men if they were properly trained. (Agree)	37	83
Certain civilian & military jobs are so unfeminine that women should be excluded from performing them. (Disagree)	36	84
Women should not be expected to serve in combat on the front line. (Disagree)	32	82

Table 7 (Continued)

Items with Equalitarian Response Indicated	Percentage Espousing Equalitarian View: Males (N = 981)	Females (N = 60)
Women on Navy Ships		
I agree with the effort to change policies to permit women to serve aboard Navy ships. (Agree)	35	94
If women were assigned to combat ships, the Navy would become less effective. (Disagree)	33	92
Women at the Academy		
Since women are prevented by law from serving aboard ships, training them at Annapolis makes little sense and, moreover, is counterproductive because it results in fewer graduates capable of defending our country. (Disagree)	40	98
Male midshipmen have benefited from having female classmates. (Agree)	39	98
Considering current laws, the Academy should only train women midshipmen for leadership roles in noncombat situations. (Disagree)	38	89
[a]I strongly feel that female military officers should be trained somewhere else (or) I would have preferred for Annapolis to remain an all-male institution. (Disagree)	26	-

Note. All comparisons of item distributions for men and women yielded highly significant χ^2's.

[a]Item not administered to women.

Perceptions of the First Year of Integration

This section will address the perceptions of various subgroups at the Academy regarding the first year of integration. Table 8, which presents opinions of men and women plebes and upperclass males concerning the impact of women on USNA, shows that responses of the men and women midshipmen were significantly different in all the areas tapped, with women more likely to perceive their impact as positive. Over one-third of the women believed physical standards had been lowered, whereas only 3 to 7 percent (two to four women) believed they had had a negative impact in any other area. Upperclassmen differed from Class of 1980 males in their perceptions throughout this section of the survey. Plebes were more likely than upperclassmen to believe women had impacted positively on academic standards (33% vs. 26%), an area where plebes had more opportunity for observation. However, nearly 80 percent of the plebes, vs. 69 percent of upperclassmen, felt women had impacted negatively on physical standards, which is also an area where plebes would be expected to have more accurate information. A greater proportion of upperclassmen than male plebes felt women had had a negative impact on discipline (76 vs. 63%), on the overall image of the Academy (57 vs. 47%), and on "my pride in being a part of the brigade" (45 vs. 31%). Opinions on the latter two areas seem to suggest that those in the all-male classes of 1977 to 1979 felt more dissonance about the presence of women at USNA than did Class of 1980 males, who had never known USNA life without women. This is supported by data in Table 9, which shows that upperclassmen were more negative than plebes toward sexual integration of the Academy and women's right to be trained there. Sixty-seven percent, vs. 60% of male plebes, felt training women at Annapolis was counterproductive "because it results in fewer graduates capable of defending our country," while only 19 percent were either personally supportive or neutral regarding coeducation at Annapolis. Thus, the hypothesis that upperclassmen would resist USNA integration more than men assigned to the Class of 1980 is confirmed.

In view of the above response patterns, the higher scores of upperclassmen relative to plebes on the more general AWS measure shown in Table 3 are somewhat anomalous. Their more equalitarian views on women in society stand in contrast to their specific attitudes on women's roles in the military and at USNA (which are more conservative than those of plebes). It is difficult to unravel causal factors, since (1) level of contact with the female minority group was not analyzed for upperclassmen at USNA, and (2) multiple measures to determine whether a trend over time is occurring as integration proceeds (i.e., toward more or less equalitarian attitudes) were not available.

Table 8

Opinions Concerning Impact of Women on the Naval Academy

Item (May 1977): What impact, in your opinion, has the admission of women to the Naval Academy had In the following areas?	Positive Impact (In Percentages)			No Difference (In Percentages)			Negative Impact (In Percentages)			χ^2 for Male Samples Only (2 x 3)
	Class of 80		Upper-Class	Class of 80		Upper-Class	Class of 80		Upper-Class	
	Females (N=60)	Males (N=981)	Males (N=475)	Females (N=60)	Males (N=981)	Males (N=475)	Females (N=60)	Males (N=981)	Males (N=475)	
Academic Standards	33.3	33.2	25.6	66.7	61.1	70.3	0	5.7	4.3	11.75*
Physical Performance Standards	15.0	4.3	5.5	48.3	16.0	25.6	36.7	79.6	68.9	20.84*
Discipline	45.8	7.6	5.5	49.2	29.3	18.7	5.1	63.0	75.8	23.80*
Overall Image of the Academy	76.6	34.7	21.5	16.7	17.8	21.7	6.7	47.4	56.7	26.46*
My Pride in Being a Part of the Brigade	91.5	16.3	6.3	5.1	52.3	49.1	3.4	31.4	44.6	40.81*

Note. All comparisons of item distributions for men and women yielded significant χ^2's.

*$p < .01$.

Table 9

Attitudes Toward Integration of USNA
of Class of 1980 Males and Upperclassmen

Item (May 1977)	Percentage Endorsement: Class of 1980 (N = 981)	Percentage Endorsement: Upperclassmen (N = 475)
1. Which of the following statements do you agree with most?[a]		
The primary function of the Naval Academy is to prepare men for command at sea. Since women are prevented by law from serving aboard ships, training them at Annapolis makes little sense and, moreover, is counterproductive because it results in fewer graduates capable of defending our country.	60	67
Ability and choice should determine one's lifetime occupation, not gender. While women under current restrictions cannot succeed to command at sea, the laws may change in this decade and they have a right to prepare themselves for this change.	40	33
2. Which of the following statements best describes your feelings about tne sexual integration of the Academy?[b]		
I strongly feel that female military officers should be trained elsewhere.	37	44
I would have preferred for Annapolis to remain an all-male institution, but don't feel strongly against integration.	37	37
It doesn't matter to me whether women are here or not.	11	8
I feel women have as much right as men to attend the Academy so I support integration.	11	11
I'm glad there are female midshipmen in my class.	4	0 (NA)

[a] $\chi^2 = 6.73$, $p < .01$.

[b] $\chi^2 = 22.03$, $p < .01$.

The May survey asked respondents to indicate their perceptions of how fourth classmen were treated by USNA personnel and upperclassmen. Results are provided in Table 10, which shows that 35 percent of the women felt that women received favoritism from physical education instructors, compared to 74 percent of the men. The discrepancies increased on perceptions of favoritism shown by upperclassmen: Sixty-one percent of the men, vs. 2 percent of the women, believed women received favoritism; while 56 percent of the women, vs. 17 percent of the men, believed men received favoritism. The belief of the male majority that women were favored appears to be entrenched, despite the fact that almost no women felt this way (most, in fact, believed the reverse). About half of the plebe men vs. 80 to 90 percent of the women believed company officers, academic instructors, the executive department, and squad leaders showed fair and equal treatment of both sexes. Men perceived company commanders to be most fair (67% denied that favoritism was shown, vs. 78% of the women). None of the women felt they had been favored by squad leaders or company commanders, and less than five percent of either sex believed women were treated like any other fourth classman.

Despite the fact that men perceived women as receiving favoritism, an untabled item showed that proportionately fewer men than women (58 vs. 75%) believed that Academy officers and professors supported integration of women into the military. This finding can be interpreted as showing a probable bias to distort the views of authority figures toward congruence with one's own view.

Problems of the Female Minority

Kanter (1977) has observed three phenomena that occur in civilian industry when sex ratios are skewed: (1) "tokens" have high visibility (tokens are defined as persons in rare categories--in this case, women), (2) polarization occurs between "dominants" (men) and tokens, and (3) dominants distort the perceived attributes of tokens to fit preexisting generalizations. Visibility and undue publicity generate performance pressures for the women, and polarization causes dominants to heighten group boundaries, emphasizing male culture and denying acceptance to the women.

Table 10

Perceptions of Equality of Treatment held by Class of 1980

Item (May 1977): What in your opinion has been the treatment of fourth classmen by . . .	Percentage Endorsing Response: Fair Treatment of Both Sexes		Women Receive Favoritism		Men Receive Favoritism	
	Men (N=981)	Women (N=60)	Men (N=981)	Women (N=60)	Men (N=981)	Women (N=60)
Physical education instructors	23	63	74	35	3	2
Upperclassmen in general	22	42	61	2	17	56
Company officers	49	89	49	7	2	5
Academic instructors	50	90	49	8	1	2
Executive department	51	93	48	5	1	2
Squad leaders	52	83	39	0	9	17
Company commanders	67	78	23	0	10	22

Note. All comparisons of item distributions for men and women yielded highly significant χ^2's.

In the May survey, women were asked to indicate which of several listed items constituted a problem for them during their first year at the Academy. Responses to this question, which are presented in Table 11, indicated that the phenomena typical of situations with skewed sex ratios were experienced by women members of the Class of 1980. As shown, 67 percent noted being an object of publicity as a problem; 67 percent, male resentment; and 64 percent, male traditions. Most women did not view male resentment as deliberate malice but, rather, as an outgrowth of male traditions. Interestingly, 55 percent experienced problems with academic standards; compared to only 36 percent who had problems with physical standards. Although about half felt pressure to prove themselves was a problem, less than one-third reported problems with emotional responses to stress. A strong majority (76%) felt attitudes of Academy authorities presented no problems. Finally, 22 percent felt that lack of senior women role models was a problem; and 12 percent, that there were too few other women "as a support group." Despite this latter report, the numerical rarity of USNA women contributed to the higher ranking problems of their overvisibility and the negative male attitudes which they perceived.

The majority of both men and women felt members of their companies were generally supportive of one another. However, women did not feel as accepted by their peers as did men. Forty-one percent of women felt they were not treated as full team members in their companies, vs. 10 percent of the male plebes; and nearly 20 percent, vs. 5 percent of the men, further felt they were not accepted by other midshipmen.

Despite company cohesiveness, most men and women agreed, as noted earlier, that the atmosphere of the Academy was one of competition between individuals and between sexes. What was the impact of this cross-sex competition on performance? By their self-report, the women were not falling victim to a "Fear of Success" syndrome (Horner, 1970) when finding themselves in competition with men. Rather, 82 percent claimed "Competition with the opposite sex tends to enhance my performance." (The men were generally indifferent to this aspect of the coeducational environment, with 63 percent discounting any performance-enhancing function of cross-sex competition.)

Obviously, Class of 1980 women experienced unique pressures as ground-breakers in a traditionally male environment, and proportionately more women than men did not finish the year. Nonetheless, those that remained reported the same level of overall satisfaction with USNA as did male plebes (75% of women and 74% of men were fairly or very satisfied). Finally, 98 percent of the remaining women, vs. 96 percent of men, expect to graduate from the Academy.

Table 11

Problems Experienced by Women in their First Year at USNA

Item (May 1977)	Percentage Endorsing "This was a problem for me" (N = 58)
Object of publicity as member of the first integrated class	67
Resentment or other negative attitudes of male peers	67
Male traditions	64
Academic standards	55
Felt I had to prove myself	48
Physical strength standards	36
Emotional responses to stress	29
Attitudes conveyed by important officers and/or authorities at the Academy	24
No senior women role models	22
Too few other women as a support group	12

CONCLUSIONS AND DISCUSSION

Men of the Class of 1980 became more equalitarian regarding rights and roles of women by the end of their plebe year. Since all the men had some contact with peer women (e.g., in the classroom), the contact hypothesis provides one possible explanation of this favorable overall attitude shift, even though contact as defined by company and platoon assignment exerted only a small differential effect. Although the lessening of stereotyping as represented in this attitude change is small in an absolute sense, the direction of the shift toward more sex-role equalitarianism still constitutes an interesting finding, particularly since summer training alone has been shown to increase traditionalism at the other service academies. Increasing the number of women at USNA, which will increase opportunities for men to associate with them, as well as the movement of the Class of 1980 women into more varied roles as upperclassmen, should increase equalitarian attitudes in coming years.

Upperclassmen were shown to be more resistant to the integration of USNA than plebe men, who had been in a coeducational environment since their entry to USNA. Graduation of the all-male classes should also tend to increase acceptance of women as midshipmen.

Although male plebes chose women as friends proportionally to the representation of women in the Class of 1980, women reported feeling less accepted by their companies than did men. In general, both sexes agreed that men and women as groups had tended to compete in the first year of integration at USNA. Such a competitive atmosphere was not conducive to reduction of intergroup friction.

Not surprisingly, the women at USNA favored full equality for women in the military and in society to a much greater degree than did the men. In general, males of the Class of 1980 tended to be less equalitarian in areas that will affect them most closely as naval officers. Thus, while the majority favored equal opportunity in principle in civilian society, only half supported direct competition for promotion between female and male naval officers. About two-thirds disapproved of shipboard or combat roles for women, and nearly three-fourths would have preferred Annapolis to remain all male.

Discrepant views on whether the sexes were treated fairly and equally suggest that female and male plebes perceived two very different realities concerning the 1976-77 year. Over half of the men of the Class of 1980 were convinced that women had been shown favoritism by upperclassmen and by USNA staff and faculty, whereas all but two to four women denied they received such treatment. (The one exception was the area of physical education, where one-third of the women perceived favoritism to their sex.) In general, women felt their impact on USNA had been positive. Men were more likely to see the impact of women on USNA's standards and image as neutral or negative.

Resentment from male peers and undue publicity, which are typical problems experienced by women in civilian organizations with skewed sex ratios, ranked first in problems reported by women plebes. These difficulties should ease as the newness of coeducation fades. Over half reported academic standards as a problem; and about one-third, physical standards.

In conclusion, it is unrealistic to expect women to be greeted with fully equalitarian attitudes at USNA as long as they are prevented from assuming equal roles with men in the larger military system. Navy women will always face the problems of a statistical minority unless Congress acts to pass legislation that will permit lifting of quotas on women in the military. For the Navy, this would concomitantly force expansion of roles for women to include sea duty, for example. Indirectly, such liberalization would lessen some of the contradictions that hinder full assimilation of female midshipmen into USNA.

RECOMMENDATIONS

As indicated previously, a mere increase in numbers of women at USNA and a wanning of the novelty of the coeducational situation should decrease the overvisibility of women midshipmen, as well as the performance pressures for women that these phenomena create. Polarization between the sexes, as well as distorted perceptions, also should be lessened through sufficient increases in numbers of women. However, since women will be a statistical minority at USNA for an indefinite time to come, other avenues of decreasing polarization and male resentment should be considered. Possible strategies include enhancement of the conditions cited earlier as being conducive to a positive effect of intergroup contact, such as encouraging a cooperative rather than competitive atmosphere between the sexes (e.g., by developing superordinate goals for intergrated companies and platoons, etc.). Further, when sufficient numbers of women are accepted (to avoid possible isolation within companies), all companies should be integrated to prevent the development of an exclusionary emphasis on male culture, as exemplified by the motto of the Class of 1979, Omnio Vir (All Male).

It is also important that equal status between groups be ensured if contact is to be favorable. Obviously, insofar as possible, women should receive the same training as men. Different opportunities for summer cruise training in 1977, due to the restriction of women from seagoing ships, is an example of the unfortunate effect of Section 6015 on equal status for female midshipmen. Within the Academy environment, equal treatment can be effected, with the possible exception of the physical performance area. If differential physical performance standards are to be established, it is crucial that a rational and fair, rather than post hoc, basis for considering individual aptitude be stated. Allowances for different aptitudes should be made for both women and men, and a well-reasoned system, which is explained to midshipmen in advance, should be developed to prevent accusations of favoritism.

Finally, the pluralistic beliefs about favoritism uncovered in this study should be made more congruent. For example, an effort should be made to help males understand the perceptions held by women, since women generally felt more isolated rather than more favored vis-à-vis men.

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